

TREATMENT INVOLVING DKK-1 OR ANTAGONISTS THEREOF

Abstract of the Disclosure

Antagonists to Dickkopf-1 (Dkk-1) protein are administered in effective amounts to treat disorders involving insulin resistance, such as non-insulin-dependent diabetes mellitus (NIDDM), hypoinsulinemia, and disorders involving muscle atrophy, trauma, or degeneration. Preferably, the antagonists are composed of compositions comprising antibodies directed to Dkk-1 in a pharmaceutically acceptable carrier for use in blocking the effects of Dkk-1. Additionally provided is a method of treating obesity or hyperinsulinemia in a mammal by administering an effective amount of Dkk-1 to a mammal. Also provided are methods of diagnosing insulin resistance, hyper- and hypoinsulinemia, obesity, and related disorders using Dkk-1 as a target and non-human transgenic animals that overexpress *dkk-1* nucleic acid.